

# Weekly Report

2017.08.21-2017.08.27

## 1. This Week

### Summarization Form

Task	Progress	Finish Time
Waveline	System: Add interactions and glyph design. Polish Details. Paper: System design not finished & Evaluation section left.	Before VIS
NSVA (Network Security)	1.Sumarize and make plans. 2.Small bugs already fixed.	9.8
Survey	Reorganize the materials.	10.30?
Foundation Material	Not started yet.	10.30
waveline revision for tist special issue	Prepare to submit.	8.31

### NSVA (Network Security)

1.Consulting students of Prof. Zhang Fan about the given new data details and system coding principles. Discussing with him about the weakness of the current system that have been mentioned by Dc. Tian and Yao.

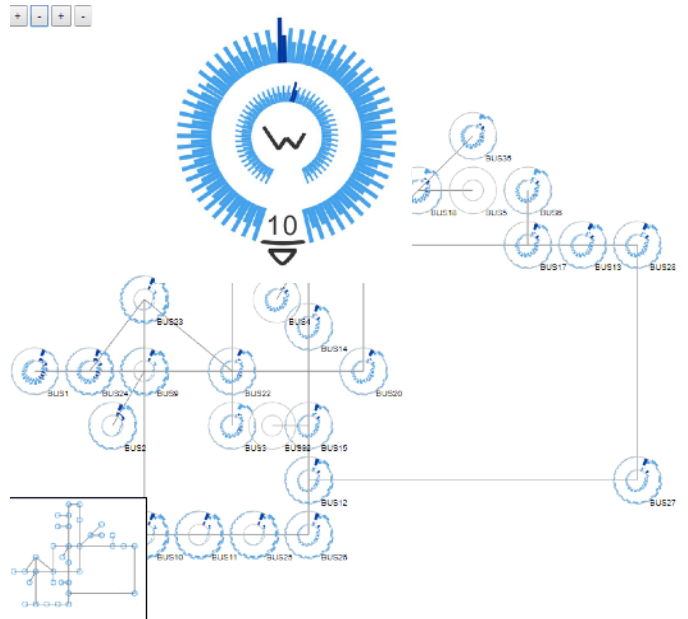
2.Having meetings with the development group to explain the system and background, assign tasks and make plans.

**(The summarization document is attached on wiki webpage as another document.)**

### Wavelines

1.Revise the waveline system, including:

- Add overview of the topological view at the bottom-left corner. Show in the overview the focusing area when zooming in.
- Revise the glyph design. Design both coarse-grained and fine-grained glyph. We try to use a bulb metaphor in our design. The following picture is a rough design of the fine-grained design. More details will be considered and polished next week.
- Revise the sort method. Last week we try to compute the similarity between variable time series of different nodes to user k-means to cluster the nodes and revise the sort. But we find the sort result not reasonable. This week I surveyed papers about time series and graph clustering methods/similarity metrics. We decide to try: (1) add node weight into similarity metric. (2) apply z-score normalization (3) try fuzzy clustering.
- Add more interactions. We add basic interactions like brush and multi-select in both topological view and waveline view to make this two part more closely related.



- Design the evaluation of the system according to the design tasks. Compare the usability of our system to traditional statistical charts used in power grid analysis before. When finished system revisionment, we may need to present the revised system to Doc. Huang and his fellows to quantitatively and qualitatively evaluate the system (this process may take half a week).
2. Polishing the design tasks and requirements of the paper.
  3. Having a meeting on Friday, discussing about the the system revise tasks and glyph design.

## **Others**

1. Plan for VIS week.

## **2. TODO**

1. Revise the waveline system and paper.
2. Organize the NSVA revise process and do paper work.